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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,487	08/01/2001	Joseph Bryan Lyles	1290	7104

28004 7590 08/13/2004
SPRINT
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER

CHANDRASEKHAR, PRANAV

ART UNIT PAPER NUMBER

2115

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,487

Applicant(s)

LYLES, JOSEPH BRYAN

Examiner

Pranav Chandrasekhar

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendments filed on 6/29/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 48 and 56-58 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Saji [US Pat No. 5,241,591].

2. As per claim 48, Saji teaches

powering a device, in a normal power mode, from a power source external to the device when the external source has power available [col. 2 lines 33-38. The voltage of external power supply being above a predetermined level is indicative of power being available in the external source. Furthermore, the normal voltage range is indicative of the device being powered in a normal power mode.];

powering the device, in a lower power mode, from the power available in a phone line when the power source external to the device does not have power available [col. 3 lines 3-19; col. 3 lines 30-44; col. 4 lines 1-6. The CPU being inoperative indicates that it is not being powered. Hence, it is evident that lower power is being provided to the device as a whole. Thus, the device is being powered in a low power mode when the external power source does not have sufficient power.].

3. As per claim 58, Saji teaches

a network interface configured to exchange communications with a communication network [col. 1 lines 12-15; col. 2 lines 55-59. The presence of a network interface in a telephone system (an integral part of a telephone communications network) is inherent.];

a plurality of interfaces configured to exchange communications with a plurality of user devices [col. 1 lines 12-15; col. 2 lines 55-59. The telephone system communicates with a plurality of interfaces to facilitate the communication with the plurality of systems.];

a power supply configured to draw power from a power source external to the device or from the communication network [col. 2 lines 33-38];

a means for detecting a loss of power from the external source [5 Fig 1];

a means for switching the power supply from the power source external to the device to the communications network when the loss of power is detected [col. 3 lines 3-19; col. 3 lines 30-44];

a means for switching to a lower power mode by lowering the power consumption of the device when the loss of power is detected [col. 3 lines 3-19; col. 3 lines 30-44; col. 4 lines 1-6. The CPU being inoperative indicates that it is not being powered. Hence, it is evident that lower power is being provided to the device as a whole. Thus, the device is being powered in a low power mode when the external power source does not have sufficient power.].

4. As per claim 56, Saji further teaches a phone connected to the device being operational for voice communications when the device is in the low power mode [col. 3

lines 3-19; col. 3 lines 30-44. The supply of power from the telephone line current facilitates voice communications. The low power mode is indicated by the fact that the CPU is inoperative when there is insufficient power from the external power source. Hence, power is not being provided to the CPU. Thus, the device is in a low power mode.]

5. As per claim 57, Saji further teaches the device being a communication device for exchanging communications with a communications network from a plurality of user devices [col. 1 lines 12-15; col. 2 lines 55-59. The telephone system is viewed as being an integral part of the communications network.].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 37, 39-44, 46, 47, 52 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saji [US Pat No. 5,241,591] in view of Bernard [US Pat No. 6,625,281].

7. As per claim 37, Saji teaches
a network interface configured to exchange communications with a
communication network [col. 1 lines 12-15; col. 2 lines 55-59. The presence of a

network interface in a telephone system (an integral part of a telephone communications network) is inherent.];

a plurality of interfaces configured to exchange communications with a plurality of user devices [col. 1 lines 12-15; col. 2 lines 55-59. The telephone system communicates with a plurality of similar systems via a communications network and hence comprises a plurality of interfaces to facilitate the communication with the plurality of systems.];

a power supply configured to draw power from a power source external to the device or from the communication network [col. 2 lines 33-38; col. 3 lines 3-9];

power control circuitry configured to detect a loss of power from the power source external to the device [col. 3 lines 5-9];

a first processor connected to the power control circuitry and configured to switch the power supply from the power source external to the device to the communications network when the loss of power is detected[col. 3 lines 3-19; col. 3 lines 30-44. The telephone line is viewed as being an integral part of the communications network.];

Saji does not explicitly teach the processor being configured to switch to a lower power mode by lowering the power consumption of the device when the loss of power is detected.

Bernard teaches the processor also being configured to switch to a lower power mode by lowering the power consumption of the device when the loss of power is

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detected [col. 2 lines 36-45. The overall lowering of power consumption of the device is viewed as being facilitated by the processor].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Saji and Bernard to lower the power consumption when a loss of power from the external source is detected in order to prevent a complete failure of the device due to a lack of insufficient power when the power of the external power source is depleted.

8. As per claim 52, Saji does not explicitly teach switching a processor to a low power mode when the device enters the low power mode.

Bernard teaches switching a processor to a lower power mode when the device enters the low power mode [col. 2 lines 36-45. The processor is viewed as being an active component of the base unit that is supplied with a lower level of voltage when the external power source fails. Hence, the processor is switched to a low power mode.].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Saji and Bernard to lower the power consumption when a loss of power from the external source is detected in order to prevent a complete failure of the device due to a lack of insufficient power when the power of the external power source is depleted.

9. As per claim 55, Saji does not explicitly teach the power source external to the device being an AC circuit.

Bernard further teaches the power source external to the device being an AC circuit [col. 2 lines 35-41].

10. As per claim 39, Saji and Bernard do not explicitly teach lowering the power consumption of the device by disabling at least one of the plurality of interfaces.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji and Bernard to disable at least one of the plurality of interfaces since disabling components in a system to lower overall power consumption of a device is well known in the art.

11. As per claim 40, Saji does not teach the power consumption of the device being lowered by switching the first processor to a lower power consumption mode.

Bernard further teaches switching the first processor to a lower power consumption mode when power from the external power source is depleted [col. 2 lines 36-45. The processor is viewed as being one of the active components in the base unit to which a lower level of voltage is supplied when the external power source fails.].

12. As per claim 41, Saji and Bernard do not explicitly teach power consumption of device being lowered by lowering the transmission rate of the network interface.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji to lower transmission rate of a network interface since lowering transmission rates are advantageous in reducing power consumption.

13. As per claim 42, Saji and Bernard do not explicitly teach a low power voice interface configured to exchange voice communications with the communication

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network and where the power consumption of the device is lowered by switching from the network interface to the low power voice interface.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji and Bernard to incorporate a low power voice interface configured to exchange voice communications with the communication network by switching from the network interface to the low power voice interface since the transitioning of control to a low power component of a device is a well known method for lowering overall power consumption of a device.

14. As per claim 43, Saji and Bernard do not explicitly teach the network interface being a digital subscriber line interface.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji and Bernard to enable the network interface to be a digital subscriber line interface since digital subscriber lines are commonly used in communication networks.

15. As per claim 44, Saji teaches one of the plurality of interfaces being an analog telephone interface [col. 1 lines 12-15; col. 2 lines 55-59. The presence of an analog telephone interface in a telephone system that is part of a communications network is inherent.].

Saji and Bernard do not explicitly teach a second one of the plurality of the interfaces being a digital computer interface.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji and Bernard to incorporate a digital computer interface in order to support communication with digital computers.

16. As per claim 46, Saji does not explicitly teach the power source external to the device being an AC circuit.

Bernard teaches the power source external to the device being an AC circuit [col. 2 lines 36-40].

17. As per claim 47, Saji further teaches the power supplied from the communication network being power supplied by a phone line [col. 3 lines 30-42].

18. As per claim 45, Saji does not explicitly teach power control circuitry being configured to detect a restoration of power from the power source external to the device and the processor is configured to switch from the low power mode to a normal power mode when the restoration of power is detected.

Bernard further teaches power control circuitry being configured to detect a restoration of power from the power source external to the device and the processor is configured to switch from the low power mode to a normal power mode when the restoration of power is detected [col. 2 line 63 – col. 3 line 2].

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji and Bernard to restore power from the source external to the device and configure the processor to switch from the low power mode to a normal power mode when the restoration of power is detected in order to provide the device with the

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appropriate power for complete functionality when there is sufficient power available from the external power source.

19. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saji [US Pat No. 5,241,591] in view of Bernard [US Pat No. 6,625,281], and further in view of Barber et al [US Pat No. 6,240,521].

20. As per claim 38, Saji and Bernard do not explicitly teach lowering power consumption of the device by switching control of the device from the first processor to a second processor having a lower power consumption than the first processor.

Barber teaches a second processor that has a lower consumption than the first processor wherein only one of the processors is active at a time. The second processor performs functions in response to a control signal from the first processor [col. 1 lines 41-46; col. 2 lines 13-30].

It would have been obvious to one skilled in the art to combine the teachings of Saji, Bernard and Barber to incorporate a second processor to perform similar functions but at a lower level of power consumption in order to enable the device to contain processor from different manufacturers and having different characteristics yet being able to perform the same function as the first processor.

21. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saji [US Pat No. 5,241,591] in view of Barber et al [US Pat No. 6,240,521].

22. As per claim 49, Saji does not explicitly teach switching from a first processor to a second processor using less power than the first processor when the device enters the low power mode.

Barber teaches a second processor that has a lower consumption than the first processor wherein only one of the processors is active at a time. The second processor performs functions in response to a control signal from the first processor [col. 1 lines 41-46; col. 2 lines 13-30].

It would have been obvious to one skilled in the art to combine the teachings of Saji and Barber to incorporate a second processor to perform similar functions but at a lower level of power consumption in order to enable the device to contain processor from different manufacturers and having different characteristics yet being able to perform the same function as the first processor.

23. Claims 50,51,53 and 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saji [US Pat No. 5,241,591].

24. As per claim 50, Saji does not explicitly teach disabling an interface when the device enters the lower power mode where the interface is configured to exchange communications with a user device.

It would have been obvious to modify the teachings of Saji to disable an interface configured to exchanged communications with a user device in a low power mode since disabling portions of a device to lower overall power consumption of a device is well known in the art.

25. As per claim 51, Saji does not explicitly teach the interface being a digital computer interface.

It would have been obvious to one skilled in the art to modify the teachings of Sheynblat to enable the interface to be a digital computer interface since digital computer interfaces are well known in the art.

26. As per claim 53, Saji does not explicitly teach switching a network interface to a lower transmission rate when the device enters the lower power mode.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Saji to lower transmission rate of a network interface in a low power mode since lowering transmission rates in turn reduces overall power consumption.

27. As per claim 54, Bernard does not explicitly teach the network interface to be a digital subscriber line interface.

It would have been obvious to one skilled in the art to modify the teachings of Bernard to enable the network interface to be a digital subscriber line interface since digital subscriber lines are a commonly used in communication networks.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pranav Chandrasekhar whose telephone number is 703-305-8647. The examiner can normally be reached on 8:30 a.m.-5:00 p.m..

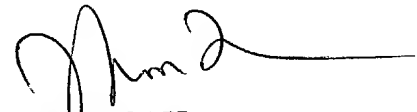
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 703-305-9717. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2100.

Pranav Chandrasekhar
August 1, 2004

A handwritten signature in black ink, appearing to read 'Thomas Lee', with a long horizontal line extending to the right.

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100